



**COUNTY OF LOS ANGELES**  
**CHIEF INFORMATION OFFICE**

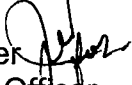
500 WEST TEMPLE STREET  
493 KENNETH HAHN HALL OF ADMINISTRATION  
LOS ANGELES, CALIFORNIA 90012


**JON W. FULLINWIDER**  
CHIEF INFORMATION OFFICER


**TELEPHONE: (213) 974-2009**  
**FACSIMILE: (213) 633-4733**

December 15, 2003

**To:** Supervisor Don Knabe, Chairman  
Supervisor Gloria Molina, Chair Pro Tem  
Supervisor Yvonne Brathwaite Burke  
Supervisor Zev Yaroslavsky  
Supervisor Michael D. Antonovich

**From:** Jon. W. Fullinwider   
Chief Information Officer

David E. Janssen   
Chief Administrative Officer

David Lambertson   
Interim Director, Internal Services Department

**Subject: INFORMATION TECHNOLOGY (IT) OPTIMIZATION  
ASSESSMENT – DECEMBER 16, 2003 BOARD AGENDA,  
ITEM 10**

On December 2, 2003, your Board continued for two weeks a motion for an Information Technology (IT) Optimization study to assess opportunities for improvement and cost savings, and instructed the Chief Administrative Officer, Chief Information Officer, and the Interim Director of Internal Services to report back to the Board regarding the effort necessary to coordinate the assessment by working closely with County agencies and departments.

Our conclusion is that many IT Optimization efforts have already been undertaken by the County and that it is premature to engage an outside consultant. Instead, we are recommending that a County working group be formed to share and implement best practices in this regard. In addition, it may be valuable to seek volunteer support from the private sector.

Current optimization activities are detailed in the attachment to this report. Some of the key initiatives include the following:

- The Chief Information Office (CIO) has for the last seven years directed its efforts toward activities associated with the cost effective and efficient application of information technology throughout the County. Results of these initiatives are documented in the annual business automation plans developed by departments as part of the annual budget process and consolidated in the Integrated Business Automation Plan (IBAP) developed and distributed by the CIO.
- The Internal Services Department's Information Technology Services Branch (ISD/ITS) has conducted several formal benchmark assessment studies over the last ten years. The latest benchmark assessment was completed less than two years ago. This assessment was conducted by an experienced outside vendor (obtained via a competitive procurement at a cost of \$225,000) who specialized in assessing and benchmarking the operation of large technology-based service providers.
- The Office of the Assessor established a server farm and consolidated servers into one location. From the Hall of Administration main office, IT staff are now capable of monitoring all the four district offices and Lancaster satellite office from one central location. The deployment of most software and upgrades can be achieved through the use of the server farm. Efficiency, reduction in manpower sent to these locations, and time have proven that this IT effort reduced administrative and operating costs and increased in effectiveness and efficiency.

The attached summary, developed with input from County departments, identifies some of the more important initiatives being undertaken to enhance the use of technology-based solutions while continuing to sustain improvements in the cost effective and efficient management of departmental IT resources.

## **SUMMARY**

The Chief Information Office has been consistent in its efforts to support projects that optimize the effectiveness of technological resources, systems, equipment, personnel and services, and has consistently promoted the identification of enterprise solutions and projects that support the optimization of technology and human resources.

As detailed in the attached background material, the County has made significant gains in the ongoing process of optimizing IT, as demonstrated by several countywide initiatives and departmental projects, including but not limited to:

- Countywide IT Strategic Planning
- Departmental Business Automation Planning Process
- Electronic Document Management Systems (EDMS)
- Geographic Information System (GIS) Data and Resource Sharing Program
- Enterprise Network (EN)
- ISD Benchmarks
- Department of Health Services (DHS) Data Center Support Consolidation
- Electronic Development and Permit Tracking System (eDAPTS)
- Master Software Licensing Agreements benefiting all County departments
- Coordination and management of Countywide Security initiatives.

The process for optimizing IT and its cost-effective application is continual. The Office of the CIO, as well as the other departmental IT organizations is actively engaged in initiatives that are outlined in the attached summary. As business needs and technologies change, opportunities for assessment and improvement will continue to present themselves. These changes in the application of technology will require a degree of post operations review to assess the effectiveness of the technology, its application in meeting business objectives, and the management of related resources.

To achieve the objectives identified by the Board Motion, it is the recommendation of the CIO and County IT organizations that we adopt the following approach in our continuing efforts to optimize IT. This approach also represents the most cost-effective solution for the County of Los Angeles given current budget conditions.

## **RECOMMENDATION**

The process for optimizing IT and its cost-effective application is continual. The Office of the CIO, as well as the other departmental IT organizations are actively engaged in initiatives that are outlined in the attached summary. To achieve the objectives identified by the Board Motion, it is the recommendation of the CIO and County IT organizations that we adopt the following approach in our continuing efforts to optimize IT.

- Establish a Departmental Working Group – As a first step, the County will establish a Countywide IT Optimization Working Group, chaired by the CIO and supported by departmental management personnel. The initial focus of this group will be to identify areas for optimization and cost reductions related to the management and operation of technology-based resources.

Each Supervisor  
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- Create an Industry Panel for Guidance on County IT Optimization - Once areas of opportunity have been identified, we would seek out industry specialists from the Information Systems Commission (ISC) and Quality & Productivity Commission to participate on a panel to provide input and guidance related to industry-wide optimization practices. This panel would be established on a volunteer (i.e., no cost basis).
- Formalize any recommended IT Optimization Strategies, incorporate any countywide initiatives into the Strategic Plan and periodically report progress to the Board.

We believe that the above approach represents the most cost-effective solution for the County of Los Angeles given current budget conditions. We understand that a recent benchmark review for the City Los Angeles cost approximately \$260,000. We anticipate that a similar study for an organization as large and as complex as the County of Los Angeles would cost significantly more.

JWF:DEJ:DL  
AM:ygd

Attachment

c:     Department Heads  
       IT Managers  
       Chair, Information Systems Commission  
       Executive Director, Quality and Productivity Commission

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# COUNTY OF LOS ANGELES



## SUMMARY OF INFORMATION TECHNOLOGY OPTIMIZATION ACTIVITIES

## **SUMMARY OF IT OPTIMIZATION ACTIVITIES**

IT optimization efforts generally focus on an ongoing assessment of performance in key areas of IT, including the delivery of service and the management of operations, as well as improving the efficient and effective use of technology to realize cost savings.

### **BACKGROUND**

Although the County's IT functions are decentralized, IT optimization efforts are addressed in the County's Strategic Plan and managed through the annual Business Automation Planning (BAP) process established by the Chief Information Office (CIO). Recognizing the importance to continually improve the County's efficient and effective use of technology, the CIO aggressively promotes and leads Countywide and departmental planning and management of the County's vital resource of information technology.

### **County of Los Angeles Strategic Plan**

On December 17, 2002, the Board of Supervisors approved the County's revised Strategic Plan, which establishes a vision, goals and strategies for the County of Los Angeles government. The Strategic Plan identifies four organizational goals and four program goals that will be jointly pursued by the County's departments and commissions. To achieve the goals articulated in the Strategic Plan, the County has challenged departments to improve the way information technology is used to deliver services. The foundation for exploring opportunities to implement these changes is a Business Automation Planning (BAP) process, which establishes a systematic planning process tied to the budget process to identify intended IT activities and the resources required to support them.

### **Business Automation Planning**

The Chief Information Office (CIO) uses the annual Business Automation Plan (BAP) process as part of its oversight function. The BAP process encourages department executives and IT managers to assess the value of IT assets and their ability to meet departmental goals and objectives, including IT optimization. The BAP provides a map to department managers and staff, and provides information for the Board, CAO and CIO on how funds will be expended. Department BAPs are reviewed to ensure that departmental goals related to IT are aligned with the IT Strategic Directions of the County.

Over the past six years the BAP development and review process has been increasingly integrated with the formal budget process. The IT Strategic Directions outlined in the BAP instructions emphasize:

## SUMMARY OF IT OPTIMIZATION ACTIVITIES

1. Leveraging the County's buying power to reduce cost and expand the scope of goods and services provided to the County.
2. Use of the Internet in providing services and web-based technologies to improve access and service delivery, while reducing the cost of support.
3. Identifying common needs across departments and developing enterprise technology solutions.
4. Identifying opportunities to consolidate, standardize and share information and technology assets to optimize the return on the County's IT investment.

The Integrated Business Automation Plan (IBAP) is an annual report of major departmental and enterprise-wide activities for the County. The report provides a high-level operating plan for the use, management and deployment of IT resources. The IBAP highlights the progress made towards achieving the goals and objectives outlined in each departmental BAP, and describes each department's accomplishments during the prior fiscal year.

### **ISD Benchmarking**

ISD has been proactively assessing its IT operations and support for quite some time and initiated formal benchmarking of its Data Center costs and performance more than ten years ago on a recurring basis. The benchmarking is performed by outside consultants and the most recent study was completed in June 2002. In addition, as part of ISD's performance measures, ISD benchmarks their hourly rates for programming and telecommunications work against those charged by outside contractors.

### **City of Los Angeles IT Optimization**

In an effort similar to that described in the Board's pending motion, the City of Los Angeles Information Technology Agency (ITA) solicited a proposal in December 2002 from Gartner, Inc. (Gartner) to conduct an IT Assessment. The goal of the engagement is to support the City in its goal of assessing its IT. The engagement focused on the assessment of three key areas: 1) Infrastructure Assessment – IT Total Expenditure, 2) Applications Development and Support Benchmark and Process Assessment, and 3) Project Management Profile. Gartner's proposal for the engagement described above was \$260,000. The final report of Gartner's assessment is to be issued in December 2003. The return on the City's investment only will be known following the City's implementation of Gartner's recommendations.

## SUMMARY OF IT OPTIMIZATION ACTIVITIES

### ENTERPRISE-WIDE IT INITIATIVES

There are a number of enterprise-wide initiatives within the County that focus not only on the optimization of IT, but also on improved delivery of service, management of IT operations and cost savings. In support of the County's Strategic Goals and in alignment with the Strategic Directions for IT, the County has various major projects that are currently underway that demonstrate progress made in assessing and optimizing the County's use of information technology including:

- Electronic Document Management Systems (EDMS) – A key component of optimization is managing data and information, including the vast numbers of documents departments handle, much more effectively and efficiently than in the past. Electronic Document Management Systems (EDMS) provide a means to collectively manage both static content, such as word processing documents, e-mail and static images, and dynamic data contained within electronically or digitally formatted documents, such as website content. The CIO has initiated a project to ensure there is a standard approach to EDMS deployment and has engaged a consultant to conduct a comprehensive EDMS analysis. This will result in the development of an enterprise-wide strategy for all future deployment of EDMS within the County.
- Geographic Information Systems (GIS) - The Chief Information Office commissioned a consulting study to assess and identify opportunities optimize the use of Geographic Information System (GIS). The consulting engagement produced a report that recommended the development of a central and shared Internet accessible infrastructure that compiles data to be displayed in combination with GIS data from a variety of departments. This shared GIS infrastructure provides expanded access to GIS data for departments that were planning redundant investments in GIS technology and expertise to meet a rising demand for geographic information.

Some of the applications being developed and deployed through the GIS Data and Resource Sharing Program are the mapping and directions on the County's Internet Portal, the County Facility Locator System, Electronic Benefits Terminal (EBT) Locator System, Safe Havens Locator System and the Sex Offender Locator System (SOLS). The National Association of Counties awarded SOLS the "Best in Class" award at their 2003 Conference.

Los Angeles County Administrative Systems (LACAS) – The acquisition and implementation of the Los Angeles County Administrative Systems (LACAS) to meet the County's Enterprise Resource Planning (ERP) system needs will provide a comprehensive and integrated approach to managing the County's financial and administrative data assets. This initiative unifies numerous



## SUMMARY OF IT OPTIMIZATION ACTIVITIES

departmental initiatives into an enterprise effort to provide a more effective Countywide solution.

- Enterprise Network (EN) – The design and operation of network infrastructure and interoperability is a critical success factor in facilitating the efficient and effective departmental and inter-departmental business processes, information flows, systems integration and IT investment sharing. The CIO has defined this common network architecture as the Enterprise Network (EN), which consists of wide area network, local area network and Internet access components.
  - Wide Area Network - As a result of the contract with SBC signed by the Board of Supervisors in May 2002, a new wide area network infrastructure has been implemented in the County. This network was designed to serve as the initial backbone of the County's overall telecommunications infrastructure. In March 2003, the final node of the initial 63 locations of the wide area network was implemented. The wide area network has been in full operation and has achieved all Service Level Agreement metrics since the roll-out.
  - Local Area Networks – Departments are continuing to upgrade their Local Area Network (LAN) infrastructures to meet the network-wiring standard adopted by the Telecommunications Systems Advisory Body (TSAB), and to provide an end-to-end uniform architecture for several facilities. Local area network implementations based on these standards will permit use of new technologies, including video distribution to the desktop, video conferencing and imaging. A number of departments have deployed some wireless LANs for both pilot testing and for production applications. The Sheriff's Department, Mental Health, Public Library, Rancho Los Amigos National Rehabilitation Center and others have wireless access points installed. ISD has deployed industry standard 802.11b wireless systems for use in the enterprise-wide wireless network. The wireless network provides access in conference rooms used by multiple departments. The ability for County field workers to wirelessly access their applications from anyplace at anytime increases worker productivity and improves constituent service delivery.
  - Internet Access – The County's Internet access continues to expand. Secured access is provided for telecommuters, field workers and traveling executives to access their e-mail and departmental applications.
- Electronic Development and Permit Tracking System (eDAPTS) – The Electronic Development and Permit Tracking System (eDAPTS) implemented within the Department of Public Works is a web-based permit tracking application that incorporates GIS, wireless and Interactive Voice Response (IVR)

## **SUMMARY OF IT OPTIMIZATION ACTIVITIES**

technologies. eDAPTS consolidates disparate departmental applications and provides a common system to manage the entire land development and permitting processes (e.g., plan review, permit issuance and site inspection), as well as other permitting and inspection needs.

### **IT ACQUISITION STRATEGIES**

Another area where the County realizes significant progress to achieve efficiencies is in the acquisition of IT. Although individual departments are responsible for determining their specific needs, the acquisition of IT-related commodities are centralized through ISD's role as the Purchasing Agent. As a result, Master Agreements have been established with a group of vendors for computers, equipment and peripherals. In addition, the CIO and ISD have worked together to establish Master Agreements for the acquisition of IT-related goods and services. These and other efforts focused on reducing the costs of IT. Among the most significant strategies was the development of a Countywide telecommunications agreement that dramatically reduced County cost for telephone services while reinvesting the savings to provide the County with a scalable communications infrastructure to leverage additional opportunities for enterprise solutions and IT optimization.

The County also has realized efficiencies in the use of IT at the department level and in providing better service to the public.

### **DEPARTMENTAL IT OPTIMIZATION ACTIVITIES**

Within the County framework, information technology is relatively decentralized amongst County departments and agencies. The Internal Services Department (ISD) is the largest IT organization with approximately 1,200 (34%) of the County's 3,550 IT-related positions. ISD initiated formal benchmarking of its Data Center costs and performance more than ten years ago on a recurring basis. The benchmarking is performed by outside consultants and the most recent study was completed in June 2002. In addition, as part of ISD's performance measures, ISD benchmarks their hourly rates for programming and telecommunications work against those charged by outside contractors.

Additionally, The Department of Health Services (DHS) identified the opportunity to improve the efficiency of its data center operations of its Hospital Information Systems (HIS), which support each of its medical centers and clinics. In 1993, DHS began the first step of consolidating the operation of these systems. Harbor-UCLA Medical Center and Olive-UCLA Medical Center operate and maintain the HIS computers for Rancho Los Amigo National Rehabilitation Center and High Desert Hospital, respectively. DHS is currently evaluating and planning the next phase of consolidation that will centralize the computer operations support for the HIS to two locations.

## SUMMARY OF IT OPTIMIZATION ACTIVITIES

The total Countywide IT budget allocation for Fiscal Year 2003-2004 is approximately \$649.5 million. There are 26 agencies and departments whose annual IT budget allocation exceeds \$1 million. Because of the highly decentralized nature of the County's IT activities, a conference call was conducted with all departments whose annual IT budget exceeded \$1 million. The purpose of the call was to determine to what extent IT optimization activities were already underway. Those activities as detailed by the departments are included in Attachment 1.

## SUMMARY OF IT OPTIMIZATION ACTIVITIES

### ATTACHMENT 1.

#### DEPARTMENT IT ASSESSMENT FEEDBACK

The following Departments have provided feedback regarding their efforts to optimize the use of IT within their organizations:

- Internal Services Department (ISD)
- Office of the Assessor
- Library
- Department of Public Social Services (DPSS)
- Child Support Services Department (CSSD)
- Probation
- Public Defender
- Department of Community and Senior Services (CSS)
- Board of Supervisors (BOS)
- Fire Department
- Department of Health Services (DHS)
- Department of Mental Health
- Department of Human Resources (DHS)

## SUMMARY OF IT OPTIMIZATION ACTIVITIES

### Internal Services Department (ISD)

#### IT-RELATED ACQUISITION & STRATEGIES

ISD has developed acquisition strategies for the procurement of IT related services and commodities that are focused on obtaining best value. Key efforts are as follows:

#### IT Services – Master Agreements

ISD has established master agreements that provide a streamlined procurement vehicle for certain types of IT related projects. When projects arise, the specific requirements can be bid among contractors who are already pre-qualified and have entered into contracts with the County. This ensures the best price (i.e., work orders are typically bid on a price basis) and enables departments to shorten the procurement time. Master Agreements currently in place include:

- **Information Technology Support Services Master Agreements (ITSSMA):** Over 140 pre-qualified vendors are under agreement to provide a range of Information Technology services in eleven different categories.
- **Telecommunications Support Services Master Agreement (TESMA):** ISD has sixteen firms under agreement for as-needed telecommunications equipment installation and related support services.

#### IT Equipment and Software

IT related equipment and software is acquired for all County departments by ISD in its role as the Purchasing agent. Efforts in this regard include:

- **Computers, Equipment and Peripherals:** ISD has established, through the competitive bid process, twelve price list agreements with computer equipment suppliers, including three manufacturers (IBM, Gateway and Hewlett-Packard) in order to streamline the acquisition process computers and related equipment for County departments.
- **Software License Agreements:** In collaboration with the CIO, ISD has established Countywide Software Licensing Agreements either through a competitive bid or negotiated/sole source process (where applicable). This approach has resulted in significant cost savings. For example; agreements currently exist with Oracle Corporation, Cisco, Motorola, Wireless Communications, GrayBar, Symantec, McAfee and others. ISD benchmarks the County prices against other organizations (e.g., State CMAS agreements) to ensure that prices are at or below those provided to other agencies.

## SUMMARY OF IT OPTIMIZATION ACTIVITIES

### Training

There are a variety of Countywide IT procurement related training and process activities. They include:

- A regular breakout session in the semi-monthly County Contracting Network meetings that is devoted to IT contracting issues and led by an experienced IT Contracts Manager.
- The 16-hour "Orientation to County Contracting Principles" developed as a collaborative effort between the Department of Human Resources, ISD, County Counsel, and the Auditor-Controller continues to be offered to staff on a regular basis. Although not IT specific, the course content is applicable to IT contract development.
- Two sessions of the 100-hour contract training certificate program, "Leadership through Contracts Management and Administration", have been given through the County's training Academy. ISD and County Counsel teach a wide range of "best practices" in contracting including coverage of IT contracting issues.
- In order to effectuate a standard County approach to IT contracting, ISD participates on an IT Procurement Task Force with various departments in an effort to establish IT Contracting Guidelines, a Policy manual, IT contracting Training and IT specific Model solicitation documents and contracts.

## SUMMARY OF IT OPTIMIZATION ACTIVITIES

### Office of the Assessor

#### Infrastructure

- **Regional Consolidation** – Consolidated of 12 regional offices into 4 district offices that achieved the reduction in administrative and operating costs. Efficiency in the staff through the improvements in IT technology were realized in the deployment of desktop computing and exchange in information between the district offices and the main office at the Hall of Administration.
- **Server Farm** – Established a server farm and consolidated servers into one location. From the Hall of Administration main office, IT staff is now capable of monitoring all the four district offices and Lancaster satellite office from one central location. The deployment of most software and upgrades can be achieved through the use of the server farm. Efficiency, reduction in manpower sent to these locations, and time has proven that this IT effort reduced administrative and operating costs and increased in effectiveness and efficiency.

#### Procurement and Contracts

- **Upgrade Departmental Software** – Upgraded the departmental software for the Microsoft and antivirus products using the set countywide enterprise agreements. The substantial savings were realized through the economies of scale using the enterprise licensing agreements.
- **Website Redesign** – Hired a contract company to redesign the Assessor's website and create a unique identity for the department. The website will create an attractive user friendly look and feel that will entice the public to obtain information. Such information provides property and sales information, as well as Assessor maps through Geographic Information System (GIS) web-based interface. This effort reduced the number of phone calls and foot traffic to the public service counters.
- **E-File Property Statements** – Contract a vendor to provide the capability for the public to e-file Personal Property Statements and enhance the process for the Business Property owners. This effort has provided the taxpayers the capability to utilize the web and provide convenience to access personal property information. Reduction in public service calls and foot traffic to the Assessor's public counters were realized. Cost savings in manpower processing hardcopy statements were realized and mailing costs were reduced.

## SUMMARY OF IT OPTIMIZATION ACTIVITIES

### Process (Operational and Development)

- **AABS Integration** – The Assessment Appeals process was cumbersome and manually processed with the use of a standalone PC. Utilizing IT staff, the existing AABS was redesigned to be integrated in a network environment with the capability of using a fully automated Comparable Sales feature. The result of the redesign enhanced the capabilities of the Appraisers to better prepare for their cases more effectively and process AABs cases quickly.
- **Address Correction** - In order to qualify for reduced postal rates, an address correction process must be enhanced to correct erroneous or improperly updated addresses maintained in the department. The United States Postal Service implemented regulations requiring mandatory reviews and certification to qualify for reduced rates. Using a presort vendors certification, the process has improved requiring reduce staff time in testing the process, reduced return mail, and reduce mailing cost.

### Management

- **Use of Professional Contract Services** – Due to the lack of expertise in areas of new technology, the use of professional contract services has substantially save manpower cost associated with technological training and development. The short development cycle and implementation of web based application, deployment of current staff to other IT projects, and the immediate realization of such savings over manpower made the professional contract.



## **SUMMARY OF IT OPTIMIZATION ACTIVITIES**

### **Library**

In recent years, the County Library has implemented IT efficiencies and cooperative projects with other County Departments in the following areas:

#### **Infrastructure**

- In October 2002, the County Library switched from an independent Internet provider to the County network, greatly improving the Internet access speed for both staff and public, and providing access for Library staff to the County intranet and other County resources, while eliminating costs for independent data circuits.
- The County Library is benefiting from the Countywide initiatives for network security hardware and software. Network intrusion devices have been installed at the County Library Headquarters data center to protect the Library's wide area network segment. These were provided by and are managed by ISD ITS network staff, eliminating the need for the Library to have staff with this level of expertise.

#### **Procurement and Contracts**

- In 2001, the County Library began using the ISD Service Center software and servers for the Library IT Help Desk functions, instead of purchasing a more costly independent system. This leveraged the existing County contract for the software, and used existing ISD Data Center servers and the expertise that ITS staff already had developed for this software.
- In FY 2003/2004, the County Library will begin using the Asset Manager software licensed under a Countywide contract and installed on County Data Center servers to leverage the existing contract, servers, and staff expertise.
- The County Library utilizes the Master purchase agreements for antivirus software on personal computers and servers, which significantly reduces software costs to the Department for this critical software.
- The County Library utilizes the Master purchase agreements for hardware, software and technology services and use the County's ITTSMa process to obtain IT consulting services.
- The County Library utilizes academic pricing whenever available to reduce costs for business and application software purchases.

## SUMMARY OF IT OPTIMIZATION ACTIVITIES

### **Process (Operational and Development)**

- The County Library purchases off-the-shelf software for new applications whenever possible. In 2002, the County Library contracted for an off-the-shelf software package to manage Internet access and provide Internet filtering for public use computers.
- The County Library, Internal Services ITS, and Parks and Recreation Departments collaborated to implement an Internet filtering system as a Countywide solution, with the servers located in the County Data Center. This cooperative implementation reduces duplication of hardware, software licenses, and staffing.
- The County Library contracts out for web page development on the Library's web site, freeing County Library staff to concentrate on content and overall design.

### **Management (project management and resource management)**

- IT training: The County Library contracts out for training on IT technical and business applications (such as data security, network management, word processing, spreadsheets, etc.), in order to save County staffing costs while ensuring a high quality of training. The County Library also takes advantage of free IT training for Library staff offered through the program funded by the County and coordinated by Local 660, to maximize the use of the Library's training budget.

## SUMMARY OF IT OPTIMIZATION ACTIVITIES

### Department of Public Social Services (DPSS)

- The areas identified for assessment more appropriately fall within the County's CIO's umbrella of responsibility.
- The County CIO already identifies and provides enterprise level standards, opportunities for cost savings and County-wide support and leadership to effect efficiency/effectiveness in enterprise level initiatives such as security and data sharing.
- The technical procurement process would be greatly enhanced by the re-establishment of ISD's Data Processing Contract Services operation. The loss of this resource has been significant for DPSS as we have several Agreements for large automated systems and appreciated the technical guidance in writing agreements, RFPs, amendments, etc. The loss of expertise formerly provided by ISD has impacted our ability to keep up with our IT contracts workload, while we train for and learn these skills.
- Aside from the above statement, we follow all technical procurement steps according to County policy, working closely with County Counsel and outside counsel in preparing legal documents. It is often necessary to seek IT resources outside, as County classifications do not cover the broad spectrum of IT skills needed to maintain our networks and systems.
- We would favor a new Data Center, and would definitely consider the alternative of bringing contracted IT operations in-house in the future.
- We have developed detailed monitoring plans to document system performance and availability, response times, invoice verification, and other contractual components within each IT agreement. We believe we do a good job in this area. We have established within DPSS a Contracts Monitoring Division, and follow all Countywide guidelines and procedures issued through that Division for our IT procurements.
- DPSS staff involved in procurement activities, be they IT or other, have and continue to attend in-depth contract training courses conducted by ISD, the Auditor-Controller, and County Counsel. These courses insure that all County departments are following the same procurement rules, as dictated by the Board.
- Our two largest systems, GEARS and LEADER, are contracted out and would not apply, at least in the short run, to this assessment. We are already bringing in a consultant to do an alternatives analysis on the best approach for continuation of the LEADER system when the current contract expires. This analysis will

## SUMMARY OF IT OPTIMIZATION ACTIVITIES

include the possibilities of bring the system in house and of adding GEARS functionality to LEADER.

## **SUMMARY OF IT OPTIMIZATION ACTIVITIES**

### **Child Support Services Department (CSSD)**

At the Child Support Services Department (CSSD), our IT budget is completely funded by the State, with no Net County Costs. Nevertheless, below are some of the IT optimization efforts currently underway within the department.

#### **Infrastructure Improvements (e.g., networks, server farms and data center)**

- CSSD is currently in the process of upgrading our Unisys disk storage units to allow us to increase access efficiency and storage capacity while significantly reducing annual maintenance costs.
- We have installed a Dell/EMC Tape backup system. This installation includes the Fiber Channel, which is the foundation for a SAN, which will be added at a later time.
- We are also expecting to install new IP-based KVM switches that have been ordered through ISD. This will greatly enhance security of the servers and will also allow easier management of IT resources.

#### **Procurement and Contracts Improvements (e.g., potential economies of scale in hardware/software)**

- We recently took delivery of 350 used PCs from Orange County, plus another 170 from the Department of Mental Health Department, all at no cost. These PCs were replaced by these agencies with new units, but are all in good working condition and will replace units here at CSSD that are older and less efficient, allowing us to upgrade some of our very old PC workstations. This has also allowed us to cancel the monthly maintenance on all PCs by increasing the number of spare PCs on hand that can be used to replace one that malfunctions. We continue to look for PCs that are no longer required by other departments to help us upgrade older/slower PC workstations still in service at the department.
- We are in the process of centralizing our Batch Printing processes to reduce labor costs of mail handlers and to realize a substantial reduction in postal rates.
- We have implemented a Barcode Reader project, which streamlines the processing of undeliverable mail, returned from the post office.

#### **Operational and Development Process Improvements (e.g., application development and maintenance, asset management, etc.)**

## SUMMARY OF IT OPTIMIZATION ACTIVITIES

- We have completely automated our software upgrade turnover process. The new automated process provides us with greater control and reliability in upgrading software on the mainframe.

## SUMMARY OF IT OPTIMIZATION ACTIVITIES

### **Probation Department**

The Probation Department has been reviewing, evaluating, and improving its information technology infrastructure in the past four years to enhance the efficiency and effectiveness of its services.

- We have expanded our data network to all Probation facilities and increased the number of desktop and notebook computers to over 4,000. All Probation employees have access to departmental information using the Department's information portal (ProbNet).
- We have also expanded access to information for our employees to remote locations using VPN and wireless technologies.
- We have expanded our E-mail system and provided E-mail accounts for all Probation staff to improve intra-departmental communication and dissemination of accurate information.
- We implemented a Kiosk Report-in system that allows low-risk, minimum supervision probationers to report via an automated system for improved monitoring, safety, supervision, and reduced costs.
- We are currently implementing an enterprise document management and workflow system that will create a centralized repository of all probation reports and other documents for instant and easy access by probation officers. This is part of a countywide initiative among justice agencies to improve information sharing.

## SUMMARY OF IT OPTIMIZATION ACTIVITIES

### Public Defender

The Public Defender's (PD) office continues to work both independently and collaboratively with other justice agencies through the Information Systems Advisory Body (ISAB) and with the Chief Information Office (CIO) for the continual improvement of our information systems and the level of service we provide to our end-users. This is being accomplished through upgrading our infrastructure, equipment and software, and more efficient utilization of our limited fiscal and human resources. Examples are illustrated below:

#### Upgrades

- Information Systems (IS) staff are responsible for the procurement, maintenance, and installation of over 1,200 networked machines at 40 locations countywide. This includes troubleshooting equipment and/or system breakdowns and repairing them on-site or having them repaired through other means. The unit also maintains 16 servers, which are closely monitored and upgraded on an ongoing basis. We are currently conducting a pilot program where three of these servers are running Windows Server 2000 Advanced. The servers have proven to be stable thus far, and we will look into migrating other servers as well.
- The replacement of outdated hardware/software systems is a high priority. The PD has established the Resource Advisory Group (RAG), which consists of PD executive management, IS management, IS technical personnel and an ISAB representative. This group meets on a regular basis for the purpose of reviewing equipment and software requests, setting policy for the approval, distribution and installation of equipment/software, and evaluating the feasibility of larger or more complex IT projects.

#### Improved Service

- The ZenWorks installation project is aimed at increasing a severely understaffed unit's ability to better serve its end-users. ZenWorks allows us to remotely access and view workstations. It also gives us the ability to "push" out software, patches and applications to workstations, transfer files from our management consoles to workstations, "chat" with users at their workstations, run diagnostics on workstations, schedule automatic backup of personal files and E-mail, and to retrieve inventory of computers at each site.
- Approximately 10% of all networked machines are now equipped with ZenWorks; however, because staff can only dedicate a small percentage of their time to do the installation (each machine has to be touched), it could take up to two years to complete it. To expedite the process, we are currently evaluating an outside vendor proposal to complete the installation in approximately three to six months.



## SUMMARY OF IT OPTIMIZATION ACTIVITIES

Based on the vendor's initial figures the proposal looks promising from both a time and cost savings perspective.

- Another service improvement project is Videoconferencing, a collaborative effort between ISAB, Probation, LASD, and the PD. Videoconferencing will save both time and money by reducing the need for lawyers and/or their support staff to travel to an incarcerated client to conduct an interview. The PD's office will continue to support and actively participate in the development of this project.
- Other IT service improvements include working closely with ISD and PD non-technical professional staff (lawyers and support staff) to enhance the PD's Web Page. The page provides public access and information regarding the PD's Office and Mission. Finally, IS staff are also working with PD professional staff in establishing a program where non-IS staff with a proven level of technical ability can voluntarily assist their co-workers with resolving minor computer problems prior to contacting the IS unit for assistance. This program has been helpful to both IS and professional staff by reducing drive time and allowing us to more quickly resolve computer problems over the phone with non-technical staff with whom we can "speak the same language."

### **Standardization**

- To standardize the quality of work conducted by our IS staff, more experienced staff are cross-training newer staff in areas outside those in which they normally perform their duties. For example, Help Desk staff are being trained in basic network administration. Also, for the purpose of succession planning and to better serve the needs of the PD, newer staff will work with more experienced staff in replacing outdated systems (such as databases developed a number of years ago in programming languages now essentially obsolete) with newer, more robust ones. These individuals will also be brought into administrative projects such as the preparation of the annual Business Automation Plan (BAP) and annual budget.
- Another area of standardization is in the use of business software applications. As referenced above, the PD has policy in place for approving the use of software applications. This is done for reasons of security, integrity of our systems and to track the number of licenses for which we pay. For example, we hold approximately 1,000 end-user licenses for the Corel WordPerfect Suite, a preferred business application among legal professionals. However, to better interface with the CIO and other County departments using the Microsoft Office suite as their main business application, we are looking into purchasing a limited number of MS Office licenses for those staff that need it most.

## SUMMARY OF IT OPTIMIZATION ACTIVITIES

- Information and computer system security is another area of standardization. The PD's office participates in the composition and review of countywide IT security policies, attends Information Security Steering Committee (ISSC) meetings, County Computer Emergency Response Team (CCERT) and other IT security related meetings. IS staff strive to maintain servers and computer systems safe from theft, intrusion, tampering, prohibited access, or improper/unapproved use.

## SUMMARY OF IT OPTIMIZATION ACTIVITIES

### **Department of Community and Senior Services (CSS)**

CSS has been working to improve internal IT operations toward efficiency and optimization of support services.

#### **Areas of Improvement**

- The department purchases on software (County-wide) of the enterprise licensing agreement for Antivirus and Microsoft select program (standardized desktop Microsoft Office Suite and Windows 2000 software).
- Consolidated various desktop client's "ACCESS" databases to MS SQL Server and centralize CSS application support between CSS/IT and ISD.
- Development various web-based application for public access to CSS programs and services.
- Development of Web-based reporting form for partner agencies to submit monthly progress reports via Internet.

## **SUMMARY OF IT OPTIMIZATION ACTIVITIES**

### **Board of Supervisors (BOS)**

#### **Technology Procurements**

- Most hardware and software purchases are made using agreement vendors selected by the County.
- Microsoft Products are purchased using CMAS pricing set by the State.
- Other projects are bid using County rules such as required.

#### **Utilization of IT Resources**

- Where possible the Executive Office uses Shared County Resources. Telecommunications equipment, Wide Area Network Routing, and Internet servers/services are done using existing county resources.

#### **Management Of IT Assets**

- Heat help desk system maintains an inventory of equipment.
- All Fixed Assets are located at one site and an inventory is maintained.
- Altiris is used to profiled installed equipment and report changes to the hardware inventory.

#### **Improvements in Service Levels**

- We are constantly upgrading our Technology and installing software to provide improvements to service. Software includes patch server and Altiris.

## **SUMMARY OF IT OPTIMIZATION ACTIVITIES**

### **Fire Department**

#### **Technology Procurements and Contracts**

- Fire utilizes the steeply discounted enterprise licensing for all virus protection products.
- Fire has realized significant cost-savings and realized improved efficiencies via the ISD ITSSMA Contracting process, which provides a streamlined and very effective process for accessing contract professional services.
- Fire utilizes the central purchasing services for development and oversight of all large technology related procurements and contracts. This yields improved efficiency via reduced procurement timeframes, improved effectiveness via ISD's highly qualified and knowledgeable purchasing staff, and cost avoidance via a reduced internal resource need for specialized purchasing and contracting knowledge.

#### **Infrastructure**

- Fire supports and is an active member of the County's Enterprise Network, which has optimized electronic communication and information sharing among all County departments and external business partners.
- Fire participated in and supported the Countywide Data Center Consolidation Study/Initiative.
- Fire, Sheriff, the Office of Public Safety, and ISD have partnered to pursue an "enterprise approach" to addressing the County's Emergency Operations Communications needs. The enterprise approach will yield improved effectiveness and efficiencies via economies of scale, enhanced interoperability, and implementation of state-of-the-art technologies.
- Fire actively supports the CIO's initiative to develop enterprise security policies and practices via the Cyber Terrorism Task Force, which will significantly diminish the County's vulnerabilities during large-scale cyber attacks.
- Fire supports the CIO's initiative to achieve efficiencies and maximize use and deployment of technical resources, through Fire's approval and support of DPW's system management of the eDAPTS.

## **SUMMARY OF IT OPTIMIZATION ACTIVITIES**

### **Process – Operations and Development**

- Annually, via preparation of the Business Automation Plan and the Annual IT Accomplishments Report, Fire supports the Board's strategy to align all IT resources and application development efforts to the Department's business goals and the County's Strategic Plan.
- Via its extensive use of the Internet and Intranet, Fire supports the CIO's strategy to utilize business technologies to reduce costs and improve service to employees, citizens and business partners.
- Via its partnership with the CIO, DPW, DRP and OEH for the development of eDAPTS, Fire supports the CIO and Board strategy to maximize the coordination and integration of IT resources to serve common business needs and clients.
- Fire has also supported this initiative in its efforts to partner with ISD to utilize the COTS Facility Asset Maintenance System being developed by ISD.
- Fire supports the CIO's application development strategies through implementation of browser-based, web-enabled systems and standards.

### **Management**

- Fire realizes cost avoidance and optimum efficiency for project management by utilizing the ISD ITSSMA Contract process to obtain services on an as needed basis.
- Fire utilizes centralized services whenever possible to meet unique or highly specialized IT resource requirements. These services are obtained from ISD ITS, ISD Purchasing, ISD Contracting, County Counsel IT services, and CIO Consultant services.

## SUMMARY OF IT OPTIMIZATION ACTIVITIES

### Department of Health Services (DHS)

#### DHS IT Consolidation Study

Under the direction of the IT Advisory Body, a joint DHS CAO committee, a vendor was engaged to conduct a study of "quick win" opportunities for improvements in DHS IT efficiency and cost effectiveness. The final report was provided to DHS in May 2003 and included the following major recommendations (with DHS position or status in parentheses):

- Centralize Electronic Mail Function and Align with County Standard (in progress).
- Deploy "Thin Client" Desktop Computing Technology (not accepted as written, the goal of reduced cost of ownership and support is correct, but DHS believes there may be other ways to achieve that goal).
- Conduct Phased Consolidation of Individual DHS IT Data Centers (DHS agrees in concept, but has not had the resources to plan and execute this recommendation. DHS will always have at least 4 data centers because of the need to have local servers to support monitoring equipment 24/7 at the four large acute hospitals.)
- Centralize PC Technical Maintenance Support and Purchase Program (long-term consideration, not yet implemented because of competing, and higher, short-term priorities directly related to patient care).
- Replace Non-critical QuadraMed Contract Personnel with DHS Staff (in progress for operations staff, DHS disagrees with regard to query writers based on past experience).
- Restructure HSA and Public Health IT Organizations (no disagreement conceptually, but deferred because of competing, and higher, short-term priorities directly related to patient care)

Only the first recommendation can be categorized as a quick-win opportunity and DHS is making solid progress in this area. None of the recommendations are a real surprise to DHS. In a couple of cases DHS disagrees to some extent with the recommendation and in others lack of resources or competing priorities, such as a new laboratory system or HIPAA compliance, have delayed acting on the recommendation. Another study will not do anything to change the situation with regard to resources or competing priorities.

## **SUMMARY OF IT OPTIMIZATION ACTIVITIES**

### **Enterprise Solutions**

In all of its new systems projects, the focus is on providing enterprise solutions wherever possible and appropriate. This will, over time, create an environment in DHS where data is more consistent and available across facilities, where patient information is available to clinicians at the point of service regardless of where in DHS the patient was last seen, and where operating and supporting major systems in an enterprise responsibility rather than a burden on each facility.

DHS is developing a DHS data repository that will provide a single, reliable source for information to support regulatory agency reporting and management decision making.

### **Implementation of the Enterprise Network**

DHS is moving off of its obsolete DHS Telecommunications Network and onto the County-standard Enterprise Network.

### **Procurement**

DHS has increased its use of bulk purchases for commodity IT items as opposed to many small purchases and HSA has established standard configurations that narrow the choices and simplify support.

### **Increase Use of Countywide and Master Agreements**

DHS is making use of Countywide agreements for Oracle software, Gartner services, GIS software, and antivirus software, among others.

### **Managed Workstations**

DHS is in the process of implementing managed workstations to simplify distribution of software upgrades and security patches, simplify accounting for software licenses, control the use and distribution of unauthorized software, and improve end user support.

### **Increased Use of ISD Resources**

DHS now has a greater openness to using ISD services where they have resources DHS does not and they provide a timely and cost-effective service. DHS has engaged ISD to manage its Learning Management System procurement project because they had expertise in this area.



## **SUMMARY OF IT OPTIMIZATION ACTIVITIES**

### **Standardized Help Desk Software**

DHS has adopted standard help desk software, Track-it, and agreed upon an initial configuration scheme to be used throughout the organization. It has not been fully implemented in DHS yet, but this roll-out is the first step towards developing a consistent level of help desk support throughout the organization.

### **Standardization of Software and Licensing**

DHS has long had the Microsoft Office Suite in use in parallel with WordPerfect and Lotus 123. The Information systems branch has formally adopted the policy of phasing out WordPerfect and Lotus 123 and has stopped buying new licenses or upgrades. For Microsoft products and other software DHS is either participating in County agreements or, where none exists, moving to DHS-wide agreements rather than piecemeal purchases.

### **User Interface**

DHS is, with each new system purchase, moving towards a Web-based user interface consistent with CIO guidelines as published in the BAP instructions.

### **System Integration and Interfaces**

DHS has standardized on the SeeBeyond e\*Gate Interface Engine as the standard environment for developing interfaces. This eliminates point-to-point interfaces that are expensive to develop and maintain. DHS has moved to centralized purchasing for this software, associated training, and supporting resources. DHS is developing a central pool of interface developers to serve all DHS facilities.

### **Continuous Search for Efficiency**

The DHS Information Management and Technology Services committee meets monthly with the specific objective of sharing best practices and identifying opportunities to improve efficiency and reduce costs. This is a process that, while severely constrained by limited resources and seemingly endless demand for IT services, continues.

## SUMMARY OF IT OPTIMIZATION ACTIVITIES

### Department of Mental Health

- Provided connectivity to all DMH sites and to LAnet. All sites, including sites which DMH shares with other departments, are up and running.
- Provided computer to virtually all DMH staff. Also provided all staff with Internet access, mental health system access, and email access. With these forms of access, clinicians and other staff have up-to-the-minute, accurate information available to them at all times to better serve clients and address their mental health issues.
- Establishing security systems to meet HIPAA requirements. Systems include safeguards in three areas:
  - Administrative (risk analysis, risk management, audit logs, etc.)
  - Physical (security, access control for facilities, records, etc.)
  - Technical (access control, authentication, etc.).
- Completed programming for Web-based HIPAA-compliant application that allows access to MHMIS (Mental Health Management Information System).
- Redesigned DMH web page. Updated it with links to provide better access by the public to DMH information and other social services resources.
- Completed installation at one site (Lancaster) of telepsychiatry project, a videoconferencing project that enables clinical staff in central location to serve consumers in remote clinics.
- Implemented data security measures to secure the environment for patient privacy.
- Installed data center that serves the entire Department and also provides backup and disaster recovery capability.
- Developed in-house application (at ACCESS telephone center, Norwalk) for 24/7 emergency response and tracking, to provide better service to consumers.

## SUMMARY OF IT OPTIMIZATION ACTIVITIES

### **Department of Human Resources (DHR)**

To reduce computing resources the Department of Human Resources required all automated applications be developed using the Web-based technology. This technology ensures that all County Departments have immediate on line access to any application that requires their input and maintenance of one of various databases. The department is also considering participation in sharing computing resources. The following is a listing of some of latest applications that have been completed and are or are pending release into production.

- **Jobs Application:** available on the Internet Web Server providing jobs information to both private and County employers.
- **Classification Specifications system:** available on the Intranet Web Server providing job item class specification information to all County department employees only.
- **Interpretive Manual:** available on the Intranet Web Server providing policy, procedure and guidelines information to all County department and employees only.
- **Employee Transfer Opportunities system:** available on the Intranet Web Server providing job availabilities information throughout the County and is accessible to the Departments and employees only.
- **Online Test Preparation System:** available on the Internet Web Server which provides the private sector and County employee the opportunity to practice taking tests for County jobs.